

ABSTRACT OF THE DISCLOSURE

A code sequence is encoded using a code conversion table in which the parity of the code sequence varies until the code states become equal to each other. The code word assignment used in this code conversion table is such that the decoded code word constraint length is 3 blocks and $q_0 \neq q_1$ for an arbitrary information sequence is satisfied even if a DC control bit is inserted at any of the first and second bits of an information word. For example, code states s_0 and s_1 when information sequences d_0 and d_1 resulted from insertion of provisional DC control bits 1 and 0 inserted at the top of an information sequence “1, 1, 0, 0, 0, 1, 0” are encoded starting with a state 3 according to a predetermined code conversion table are equal to each other, namely, $s_0 = s_1 = 6$, in a third block, and two’s complement q_0 of a sum of code sequences c_0 up to a time when the code states are equal to each other is “0” while two’s complement q_1 of a sum of code sequences c_1 up to that time is “1”. That is, the condition that $q_0 \neq q_1$ is met. The present invention can be applied to a recorder/player or encoder.